

23117

PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference BN 48 PCT	FOR FURTHER ACTION see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, item 5 below.	
International application No. PCT/ EP 03/ 08359	International filing date (day/month/year) 29/07/2003	(Earliest) Priority Date (day/month/year) Bavarian Nordic 07/08/2002
Applicant BAVARIAN NORDIC A/S		Rec.date: 23. Dez. 2003 Respons..

DUE:

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 6 sheets.

☒ It is also accompanied by a copy of each prior art document cited in this report.

1. Basis of the report

- a. With regard to the **language**, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ the international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

- b. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international search was carried out on the basis of the sequence listing :

☒ contained in the international application in written form.

☒ filed together with the international application in computer readable form.

☐ furnished subsequently to this Authority in written form.

☐ furnished subsequently to this Authority in computer readable form.

☐ the statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.

☐ the statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished

2. ☐ **Certain claims were found unsearchable** (See Box I).

3. ☐ **Unity of invention is lacking** (see Box II).

4. With regard to the **title**,

☒ the text is approved as submitted by the applicant.

☐ the text has been established by this Authority to read as follows:

5. With regard to the **abstract**,

☒ the text is approved as submitted by the applicant.

☐ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. The figure of the **drawings** to be published with the abstract is Figure No.

☐ as suggested by the applicant.

☒ because the applicant failed to suggest a figure.

☐ because this figure better characterizes the invention.

6
☐ None of the figures.

INTERNATIONAL SEARCH REPORT

International Application No

PCT/EP 03/08359

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 C12N15/86 C07K14/07 A61K39/275 A61K35/76 C12N5/10
C12N15/69

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C12N C07K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, BIOSIS, EMBASE, CHEM ABS Data, WPI Data, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	FANG ZHI-YU ET AL: "Expression of vaccinia E3L and K3L genes by a novel recombinant canarypox HIV vaccine vector enhances HIV-1 pseudovirion production and inhibits apoptosis in human cells" VIROLOGY, vol. 291, no. 2, 20 December 2001 (2001-12-20), pages 272-284, XP002263751 ISSN: 0042-6822	18-26
Y	the whole document ---	1-28
X	WO 98 40501 A (VIROGENETICS CORP) 17 September 1998 (1998-09-17)	18-26
Y	the whole document ---	1-28
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Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

* Special categories of cited documents :

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- * & * document member of the same patent family

Date of the actual completion of the international search

3 December 2003

Date of mailing of the international search report

22/12/2003

Name and mailing address of the ISA

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Valcarcel, R

INTERNATIONAL SEARCH REPORT

International Application No

PCT/EP 03/08359

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	SOMOGYI P ET AL: "FOWLPOX VIRUS HOST RANGE RESTRICTION: GENE EXPRESSION, DNA REPLICATION, AND MORPHOGENESIS IN NONPERMISSIVE MAMMALIAN CELLS" VIROLOGY, ACADEMIC PRESS, ORLANDO, US, vol. 197, no. 1, November 1993 (1993-11), pages 439-444, XP001083667 ISSN: 0042-6822 the whole document ---	1-28
Y	PERKUS M E ET AL: "VACCINIA VIRUS HOST RANGE GENES" VIROLOGY, RAVEN PRESS, NEW YORK, NY, US, vol. 179, 1990, pages 276-286, XP000255782 ISSN: 0042-6822 the whole document ---	1-28
Y	WYATT L S ET AL: "Marker Rescue of the Host Range Restriction Defects of Modified Vaccinia Virus Ankara" VIROLOGY, ACADEMIC PRESS, ORLANDO, US, vol. 251, no. 2, 25 November 1998 (1998-11-25), pages 334-342, XP004445563 ISSN: 0042-6822 cited in the application the whole document ---	1-28
Y	BEATTIE E ET AL: "HOST-RANGE RESTRICTION OF VACCINIA VIRUS E3L-SPECIFIC DELETION MUTANTS" VIRUS GENES, KLUWER ACADEMIC PUBLISHERS, BOSTON, US, vol. 12, no. 1, 1996, pages 89-94, XP000990662 ISSN: 0920-8569 the whole document ---	1-28
A	US 5 833 975 A (COX WILLIAM I ET AL) 10 November 1998 (1998-11-10) the whole document ---	1-28
A	WO 02 056668 A (US GOVERNMENT ; FERRIS ANDREA L (US); HUGHES STEPHEN H (US)) 25 July 2002 (2002-07-25) the whole document -----	1-28

INTERNATIONAL SEARCH REPORT

International application No.
PCT/EP 03/08359**Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)**

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☒ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:

Although claims 13 and 14 are directed to a method of treatment of the human/animal body, the search has been carried out and based on the alleged effects of the compound/composition.
2. ☐ Claims Nos.:
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/EP 03/08359

Patent document cited in search report		Publication date		Patent family member(s)	Publication date
WO 9840501	A	17-09-1998	US	5990091 A	23-11-1999
			AU	746402 B2	02-05-2002
			AU	6158498 A	29-09-1998
			EP	0970226 A1	12-01-2000
			JP	2001514518 T	11-09-2001
			US	6130066 A	10-10-2000
			WO	9840501 A1	17-09-1998
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US 5833975	A	10-11-1998	US	5378457 A	03-01-1995
			US	5155020 A	13-10-1992
			AU	719456 B2	11-05-2000
			AU	5645798 A	04-06-1998
			AU	684070 B2	04-12-1997
			AU	6165294 A	15-08-1994
			CA	2153336 A1	04-08-1994
			EP	0680331 A1	08-11-1995
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			US	2003198623 A1	23-10-2003
			US	5942235 A	24-08-1999
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			AT	247163 T	15-08-2003
			AU	701599 B2	04-02-1999
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			DE	69233158 D1	18-09-2003
			EP	1367128 A1	03-12-2003
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			US	5989561 A	23-11-1999
			US	5759553 A	02-06-1998
			US	5744141 A	28-04-1998
			US	5843456 A	01-12-1998
			US	5759841 A	02-06-1998
			US	5997878 A	07-12-1999

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PAT/EP 03/08359

Patent document cited in search report		Publication date		Patent family member(s)	Publication date
WO 02056668	A	25-07-2002	WO	02056668 A2	25-07-2002